



Water-Data Report 2008

01594000 LITTLE PATUXENT RIVER AT SAVAGE, MD

Upper Chesapeake Basin
Patuxent Subbasin

LOCATION.--Lat 39°08'03.9", long 76°48'58.2" referenced to North American Datum of 1983, Howard County, MD, Hydrologic Unit 02060006, on left bank 20 ft downstream from bridge on southbound lanes of U.S. Highway 1, 0.4 mi southeast of Savage, 0.9 mi downstream from Middle Patuxent River, and 16.2 mi upstream from mouth.

DRAINAGE AREA.--98.4 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1939 to September 1958. Annual maximums, water years 1959-66, 68, 72, 75. October 1975 to September 1980. May 1985 to current year. Prior to December 1939 monthly discharge only, published in WSP 1302.

REVISED RECORDS.--WRD MD-DE-89: 1985, 1987-88(P).

GAGE.--Water-stage recorder. Elevation of gage is 122.90 ft above National Geodetic Vertical Datum of 1929. Prior to October 1958, water-stage recorder at site 400 ft downstream at same datum. October 1958 to September 1972, crest-stage gage at site 400 ft downstream on right bank at same datum. October 1975 to September 1980, water-stage recorder at site 500 ft downstream at same datum.

REMARKS.--Records good except those above 10,000 ft³/s and those for estimated daily discharges (ice effect), which are fair. Some diurnal fluctuation at low flow caused by plant 0.5 mi upstream. U.S. Geological Survey gage-height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 1	2015	2,890	10.28
May 12	0715	*3,530	*10.98

Minimum discharge, 6.3 ft³/s, Oct. 1.

01594000 LITTLE PATUXENT RIVER AT SAVAGE, MD—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	6.5	28	25	79	1,010	61	73	102	105	56	24	19
2	6.7	26	26	63	612	58	69	93	80	46	55	16
3	7.3	24	96	52	149	56	68	85	70	38	36	15
4	7.7	24	55	52	102	57	211	80	337	35	25	13
5	8.2	24	38	58	87	437	101	73	249	39	21	12
6	8.6	25	39	66	81	138	104	71	102	123	21	319
7	8.6	24	39	59	74	122	90	67	112	135	20	172
8	8.5	20	54	50	66	211	79	65	122	53	19	52
9	7.9	19	64	47	63	130	74	354	79	49	18	37
10	7.7	21	59	46	61	92	72	228	71	90	15	79
11	11	22	54	58	53	84	71	213	145	43	15	37
12	11	29	46	63	53	79	103	2,470	74	35	15	31
13	9.2	35	40	49	601	74	76	477	62	35	13	90
14	8.1	35	40	49	278	71	70	205	88	190	13	42
15	8.7	83	36	46	122	70	66	155	107	66	18	28
16	9.5	77	337	43	95	145	63	298	74	43	15	24
17	9.3	38	143	47	83	88	61	183	108	35	15	21
18	9.2	31	71	108	83	76	61	138	69	31	12	20
19	11	27	56	93	77	122	59	123	55	27	12	19
20	13	27	50	66	69	232	264	246	51	29	10	17
21	14	27	43	e48	66	104	995	186	46	25	9.0	16
22	11	26	40	e52	73	85	264	125	44	23	9.1	17
23	9.6	24	55	54	79	78	137	106	43	50	9.1	17
24	17	23	119	54	70	73	103	98	41	112	9.4	21
25	167	23	60	e50	66	70	88	91	38	39	9.9	16
26	173	24	60	e48	69	69	80	87	37	28	9.0	49
27	751	32	77	46	80	67	181	85	52	33	8.2	252
28	116	30	56	46	66	67	368	81	119	42	12	222
29	50	26	170	45	59	65	306	76	67	29	40	68
30	35	26	88	63	---	62	133	73	77	27	79	44
31	30	---	112	56	---	62	---	91	---	25	29	---
Total	1,551.3	900	2,248	1,756	4,447	3,205	4,490	6,825	2,724	1,631	615.7	1,785
Mean	50.0	30.0	72.5	56.6	153	103	150	220	90.8	52.6	19.9	59.5
Max	751	83	337	108	1,010	437	995	2,470	337	190	79	319
Min	6.5	19	25	43	53	56	59	65	37	23	8.2	12
Cfsm	0.51	0.30	0.74	0.58	1.56	1.05	1.52	2.24	0.92	0.53	0.20	0.60
In.	0.59	0.34	0.85	0.66	1.68	1.21	1.70	2.58	1.03	0.62	0.23	0.67

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 – 1958, 1976 – 1980, 1985 – 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	77.3	101	122	144	145	169	143	126	104	76.0	61.4	72.4
Max	336	260	386	386	375	368	351	367	371	312	315	432
(WY)	(1980)	(1997)	(1997)	(1979)	(1979)	(1994)	(1952)	(1989)	(2006)	(1945)	(1955)	(1979)
Min	14.7	22.5	35.4	34.0	37.1	74.5	60.0	39.5	25.5	13.8	15.1	8.94
(WY)	(1942)	(1942)	(1999)	(1942)	(2002)	(2002)	(1947)	(1955)	(1986)	(1999)	(1957)	(2007)

SUMMARY STATISTICS

	Calendar Year 2007	Water Year 2008	Water Years 1940–1958, 1976–1980, 1985–2008
Annual total	30,844.0	32,178.0	
Annual mean	84.5	87.9	112
Highest annual mean			196
Lowest annual mean			43.8
Highest daily mean	1,860	Apr 15	2,470 May 12
Lowest daily mean	5.3	Sep 26	6.5 Oct 1
Annual seven-day minimum	6.3	Sep 21	7.7 Oct 1
Maximum peak flow			3,530 May 12
Maximum peak stage			10.98 May 12
Instantaneous low flow			6.3 Oct 1
Annual runoff (cfsm)	0.859		0.893
Annual runoff (inches)	11.66		12.16
10 percent exceeds	152		159
50 percent exceeds	55		56
90 percent exceeds	9.6		13
			^a 35,400 Jun 22, 1972
			^b 25.40 Jun 22, 1972
			1.1 Aug 21, 2002 ^c

^a From rating curve extended above 11,000 ft³/s on basis of contracted-opening measurement of peak flow.

^b From floodmarks.

^c Aug. 21, 2002.

